



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,795	08/27/2003	Shinichi Kamoshida	Q77175	4498

23373 7590 03/03/2005

SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER
----------

TRAN, HUAN HUU

ART UNIT	PAPER NUMBER
----------	--------------

2861

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/648,795

Applicant(s)

KAMOSHIDA ET AL.

Examiner

Huan H. Tran

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-19 is/are allowed.
- 6) ☒ Claim(s) 1, 4-7 and 20 is/are rejected.
- 7) ☒ Claim(s) 1-3, 8-12, 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 08/27/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Objections*

2. Claims 1, 2, 3 are objected to because of the following informalities:

Claim 1, line 11, "a second writing member" should be changed to --a second wiring member--.

Claim 1, line 12, "the second electrode group" lacks antecedent basis. It should be changed to --a second electrode group--.

Claim 2, line 3, "the second electrode group" lacks antecedent basis.

Claim 3, line 2, "the second electrode group" lacks antecedent basis.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 2, 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 12, "the second electrode group" lacks antecedent basis. It should be changed to --a second electrode group--.

Claim 2, line 3, "the second electrode group" lacks antecedent basis.

Claim 3, line 2, "the second electrode group" lacks antecedent basis.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 4, 5, 6, 7, 13, 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Koga et al. (US Patent 6618065)

The applied reference has a common assignee/inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As to claim 1, with reference to Figs. 1B and 12, Koga et al. discloses a writing head (3) for forming cylindrical image carrier (2), comprising:

a flexible film substrate (3a);

a plurality of writing electrodes (3b), arranged on a first face of the film substrate in a first direction parallel with an axial direction of the image carrier, the writing electrodes adapted to be abutted against an outer periphery of the image carrier to provide electric charges thereto;

a first wiring member (not shown in Fig. 20 but is inherent as shown in Fig. 1B), arranged on the first face of the film substrate to supply signals from a first electrode driver (11) to a first electrode group in the writing electrodes (3b); and

a second wiring member (not shown in Fig. 20 but is inherent as shown in Fig. 1B), arranged on a second face of the film substrate to supply signals from a second electrode driver to the second electrode group in the writing electrodes (3b).

As to claim 4, Koga et al. teaches the limitation "wherein the first face and the second face of the film substrate are defined by a single outer face of a folded film member". See Fig. 12.

As to claim 5, Koga et al. teaches the limitation "wherein the writing electrodes are arranged so as to form a plurality of arrays which are arranged in a second direction perpendicular to the first direction". See Fig. 13A which shows the writing electrodes (3b) arranged in two rows in a second direction perpendicular to the first direction (the axial direction of the image carrier (2)).

As to claim 6, Koga et al. teaches the limitation "wherein the writing electrodes are arranged such that writing electrodes in adjacent arrays forms a zigzag arrangement with regard to the first direction" See Fig. 13B.

As to claim 7, Koga et al teaches the limitation that the writing electrodes are arrayed with regard to both the first direction and the second direction. See Fig. 13A.

As to claim 13, Koga et al. teaches an image forming apparatus for forming a visible image from the electrostatic latent image formed by the writing head as set forth in claim 1. See Fig. 1A.

As to claim 20, with reference to Figs. 1B and 12 in particular, Koga et al. suggests a method of manufacturing a writing head (3) for forming a latent image on an image carrier (2), comprising steps of:

providing a flexible film member (3a);

forming a plurality of writing electrodes (3b) on a first face of the film member;

forming a first wiring member on the first face of the film member so as to be connected to a first electrode group in the writing electrodes (the first wiring member is not shown in Fig. 12 but is inherent as shown in Fig. 1B to connect a first group of the writing electrodes (3b) to the driver 11);

forming a second wiring member on the first face of the film member so as to be connected to a second electrode group in the writing electrodes (the second wiring member is not shown in Fig. 12 but is inherent as shown in Fig. 1B to connect a second group of the writing electrodes (3b) to the driver 11);

defining a folding line on the film member so as to avoid the writing electrodes (the tip of the hair pin shaped writing head 3); and

folding the film member at the folding line to form a film substrate, such that the first wiring member and the second wiring member are arranged on opposite faces of the film substrate.

***Allowable Subject Matter***

7. Claims 14-19 are allowed.

8. Claims 8-12, 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter:

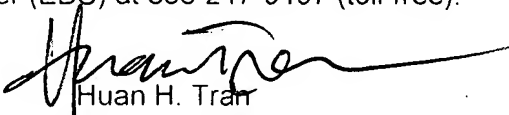
As to claim 21, Koga et al. does not teach or suggest the step of applying an adhesive agent on at least a part of a second face of the film member which is to be an inner face at the step of folding the film member.

As to claim 14 and dependent claims thereof, prior art of record do not teach or suggest limitations regarding the claimed reinforcement member.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huan H. Tran whose telephone number is (571) 272-2261. The examiner can normally be reached on at work on W-F from 6:30 to 5; T are telework days.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Talbott can be reached on (571) 272-1934. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Huan H. Tran  
Primary Examiner  
Art Unit 2861